Glu Tyr Ile His Gln Phe Thr Lys Gly Glu Ala Ile Val Ala Thr Asp 385 390 395 400 Val Gly Gln His Gln Met Trp Ser Ala Gln Phe Tyr Pro Phe Gln Lys 405 410 415 Ala Asp Lys Trp Val Thr Ser Gly Gly Leu Gly Thr Met Gly Phe Gly 420 425 430 Leu Pro Ala Ala Ile Gly Ala Gln Leu Ala Glu Lys Asp Ala Thr Val 435 Val Ala Val Val Gly Asp Gly Gly Phe Gln Met Thr Leu Gln Glu Leu 450 455 460 Asp Val Ile Arg Glu Leu Asn Leu Pro Val Lys Val Val Ile Leu Asn 480 465 470 475 Asn Ala Cys Leu Gly Met Val Arg Gln Trp Gln Glu Ile Phe Tyr Glu 485 490 495 Glu Arg Tyr Ser Glu Ser Lys Phe Ala Ser Gln Pro Asp Phe Val Lys 500 505 510 Leu Ser Glu Ala Tyr Gly Ile Lys Gly Ile Arg Ile Ser Ser Glu Ala 515 520 525 Glu Ala Lys Glu Lys Leu Glu Glu Ala Leu Thr Ser Arg Glu Pro Val 530 535 540 Val Ile Asp Val Arg Val Ala Ser Glu Glu Lys Val Phe Pro Met Val 545 550 555 560 Ala Pro Gly Lys Gly Leu His Glu Met Val Gly Val Lys Pro 565 570 <210> 33 <211> 525 <212> DNA <213> Bacillus subtilis <220> <221> CDS <222> (1)..(522) <400> 33 ttg aaa aga att atc aca ttg act gtg gtg aac cgc tcc ggg gtg tta 48 Met Lys Arg Ile Ile Thr Leu Thr Val Val Asn Arg Ser Gly Val Leu 10 15 1 aac cgg atc acc ggt cta ttc aca aaa agg cat tac aac att gaa agc 96 Asn Arg Ile Thr Gly Leu Phe Thr Lys Arg His Tyr Asn Ile Glu Ser 20 30 att aca gtt gga cac aca gaa aca gcc ggc gtt tcc aga atc acc ttc 144 Ile Thr Val Gly His Thr Glu Thr Ala Gly Val Ser Arg Ile Thr Phe 35 40 gtc gtt cat gtt gaa ggt gaa aat gat gtt gaa cag tta acg aaa cag

Val Val His Val Glu Gly Glu Asn Asp Val Glu Gln Leu Thr Lys Gln

192

	50					55					60					
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_		_	_		gag Glu	_	_			_	_	_				288
		_			att Ile					_	_		_	_		336
_	_	_	_	***	aga Arg	-	_		_	_	_	_			_	384
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Ser Asn Lys	Ile Glu	Ala	Leu	Ile	Glu	Leu	Leu	Lys	Pro	Tyr	Gly	Ile
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caa gga aaa tct ttc act caa gcc caa gaa gac gga cat aaa gta ttt 192 Gln Gly Lys Ser Phe Thr Gln Ala Gln Glu Asp Gly His Lys Val Phe 50 55 60

tca gta aaa gaa gcg gca gcc caa gcc gaa atc atc atg gtt ctg ctt 240 Ser Val Lys Glu Ala Ala Ala Gln Ala Glu Ile Ile Met Val Leu Leu 65 70 75 80

ccg gat gag cag cag caa aaa gta tac gaa gct gaa atc aaa gat gaa 288 Pro Asp Glu Gln Gln Lys Val Tyr Glu Ala Glu Ile Lys Asp Glu 85 90 95

ttg aca gca gga aaa tca tta gta ttc gct cat gga ttt aac gtg cat
Leu Thr Ala Gly Lys Ser Leu Val Phe Ala His Gly Phe Asn Val His
100 105 110

ttc cat caa att gtt cct ccg gcg gat gta gta gta ttc tta gtg gcc
Phe His Gln Ile Val Pro Pro Ala Asp Val Asp Val Phe Leu Val Ala
115 120 125

cct aaa ggc ccg gga cac ttg gta aga aga aca tat gag caa gga gct
Pro Lys Gly Pro Gly His Leu Val Arg Arg Thr Tyr Glu Gln Gly Ala
130 135 140

ggc gta cct gca ttg ttc gca atc tat caa gat gtg act gga gaa gca 480 Gly Val Pro Ala Leu Phe Ala Ile Tyr Gln Asp Val Thr Gly Glu Ala 145 150 155 160

aga gac aaa gcc ctc gct tat gct aaa gga atc ggc ggc gca aga gcg 528